Amendments to Drawings

An amended sheet of drawings is enclosed herewith, correcting minor errors in Fig. 15. Fig. 15 now corresponds with the specification text, showing a burning phase 124 and a coasting phase 126 in the flight of the missile.

REMARKS

Following entry of the above amendment, claims 3-28 and 30-48 will be pending. Claims 1, 2, and 29 have been canceled. Claim 3 has been re-written without change in scope, to include the features recited in canceled claims 1 and 2. Claims 4, 5, 7, 8, 13, and 15 have been amended to depend upon claim 3, rather than canceled claims 1 and 2. Claim 28 has been amended to restore it to its original scope, adding back the clause that was originally in the claim, and was also in canceled claim 29.

An amended sheet of drawings is submitted herewith.

Information Disclosure Statement

An Information Disclosure Statement is submitted herewith, making of record references cited in a corresponding PCT application.

Allowable Subject Matter

The indicated allowance of claims 12, 17-27, and 38-48 is noted with appreciation, as is the indication that claim 29 constitutes allowable subject matter. As indicated above, claim 28 has been amended to return it to its original scope, adding back the clause in canceled claim 29, and making it identical in scope to canceled claim 29. Claim 28 is thus in condition for allowance, and claims 30-37, which depend upon claim 28, are allowable as well.

Prior Art Rejections

Combination of Dransfield and Copeland

Claims 3-7, 15, and 16 stand rejected under 35 USC 103(a) as obvious over Dransfield et al., U.S. Patent No. 5,159,151 ("Dransfield") in view of Copeland et al., U.S. Patent No. 3,970,006 ("Copeland"). Withdrawal of the rejections is respectfully requested for at least the following reasons.

As discussed in the last Reply, Dransfield discloses a missile having a forward fairing assembly 16 and domed window member 13. An explosive charge 25 is detonated in flight to drive the forward firing member 16 forward, causing it to disconnect from the missile, leaving the domed window member 13 exposed. Dransfield does not disclose an at least two nosecones that are configured to separate during flight – the domed window member 13 is not designed to separate during flight.

Copeland describes a protective cover 14 for a missile nose cone 10. The protective cover 14 includes a rigid outer shell 16, a foam backing 18, and a shaped linear charge 20. Col. 1, lines 46-59. Copeland describes the other shell 16 as being made of polyethylene. Col. 1, lines 60-62. The function of the polyethylene nose cone cover of Copeland is for protecting a missile nose cone from debris that might be kicked up during aircraft take-off and landing. Col. 1, lines 12-23; col. 2, lines 35-38. The linear charge 20 is detonated to remove the protective cover 14 before the missile is launched. Col. 2, lines 39-43. Copeland does not disclose any separation of a nosecone or nose cover during flight of the missile. Further, Copeland does not disclose an outer nosecone that is more streamlined than an inner nosecone, since the rigid outer shell 16 is not more streamlined than the nose cone 10.

Claim 3 recites a missile that includes *inter alia*, a pair of nosecones that separate from a payload assembly during flight of the missile, wherein the outer nosecone has a more streamlined shape than the inner nosecone. Dransfield and Copeland do not teach or suggest a missile with a pair of nosecones that separate during flight. Dransfield's missile has only its outer nosecone separating during flight. For Copeland's missile, only the protective nose cover 14 is separable. Even with the references combined, with Copeland's nose cover 14 overlying Dransfield's fairing member 16, for two reasons Dransfield and Copeland do not teach or suggest the features of claim 3. First, Copeland's nose cover 14 is removed prior to launch, col. 2, lines 39-43, and is thus not a nosecone that separates during flight of the missile, as is

recited in claim 3. Even with Copeland's nose cover 14 on Dransfield's fairing member 16, the resulting missile would have only one nosecone that separates during flight (Dransfield's fairing member 16). Secondly, even combined, Dransfield and Copeland do not teach or suggest a separable outer nosecone that is more streamlined than a separable inner nosecone. Copeland's rigid outer shell 16 is not more streamlined than Copeland's nose cone 10, and nothing in Copeland or Dransfield suggests making the rigid outer shell 16 more streamlined than the nosecone it covers. Since Copeland's nose cover 14 is designed to be removed prior to launch of the missile, there is no particular advantage in having it be more streamlined than a nosecone that would be exposed during flight. Thus Dransfield and Copeland, even if combined, do not teach or suggest another feature recited in claim 3. Therefore for multiple reasons claims 3-7, 15, and 16 are patentable over Dransfield and Copeland, either alone or in combination.

Combination of Dransfield, Copeland, and Crockett

Claims 8-11 stand rejected under 35 USC 103(a) as unpatentable over Dransfield, in view of Copeland, further in view of Crockett, U.S. Patent No. 3,601,055 ("Crockett"). Crockett does not make up for the above-discussed failure of Dransfield and Copeland to teach or suggest the recited features of claim 3. Thus claims 8-11 are patentable over Dransfield, Copeland, and Crockett, alone or in combination.

Combination of Dransfield, Copeland, and Facciano

Claims 13 and 14 stand rejected under 35 USC 103(a) as unpatentable over Dransfield, in view of Copeland, further in view of an article by Facciano. The Facciano article is relied upon for teaching use of a composite material in nosecone petals. The Facciano article does not make up for the above-discussed failure of Dransfield and Copeland to teach or suggest the recited features of claim 3. Thus claims 13 and 14 are patentable over Dransfield, Copeland, and the Facciano article, alone or in

combination.

Conclusion

For at least the foregoing reasons, withdrawal of the rejections of the claims is respectfully requested, in which event this application would be in condition for allowance. Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

A credit card payment form in the amount of **$1240.00** is enclosed for the cost of filing a Request for Continued Examiation (RCE), and for a 2-month extension of time. In the event any additional fees are due in connection with the filing of this paper, the Commissioner is authorized to charge those fees to Deposit Account No. 18-0988 (Charge No. RAYTP0229USA).

Respectfully submitted,
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